

AMENDMENT TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS

1. (Original) A method for communicating, comprising:
 - characterizing a set of two or more communication channels;
 - determining a forward-time delay value based on the communication channels and based on a common composite matrix;
 - determining a time-reverse delay value based on the received communication signal and based on the common composite matrix;
 - selecting one of the forward-time delay value and the time-reverse delay value;and
 - equalizing a received signal based on the selected delay value.
2. (Original) The method of claim 1, wherein the forward-time delay is determined based on a minimum-mean-square-error technique.
3. (Original) The method of claim 2, wherein the time-reversed delay is determined based on a minimum-mean-square-error technique.
4. (Original) The method of claim 3, wherein the selected delay has a smaller mean-square-error than the other delay.
5. (Original) The method of claim 1, further comprising estimating a number of symbols based on the selected delay.
6. (Original) The method of claim 5, wherein the estimated symbols are estimated based on a decision-feedback-estimation (DFE) technique.

7. (Original) The method of claim 6, wherein the detected symbols are estimated based on a minimum-mean-square-error - decision-feedback-estimation (MMSE-DFE) technique.

8. (Original) The method of claim 5, wherein the estimated symbols are estimated based on an advanced delayed decision feedback sequence estimation (ADDFSE) technique.

9. (Original) The method of claim 2, wherein the received signal is received using a plurality of receive devices.

10. (Original) The method of claim 9, wherein at least a first portion of the received signal received by a first receive device is delayed using the selected delay.

11. (Currently amended) A communication device, comprising:
a channel estimation device that characterizes a set of two or more communication channels;
a forward-time device that determines a set of one or more forward-time delays based on the set of communication channels and a common composite matrix;
a time-reverse device that determines a set of one or more time-reverse delays based on the set of communication channels and the common composite matrix; and
a selector that selects ~~one of the~~ one of the set of forward-time delays and the set of time-reverse delays to produce a set of selected delays.

12. (Original) The device of claim 11, wherein the set of forward-time delays is determined based on a minimum-mean-square-error technique.

13. (Original) The device of claim 12, wherein the set of time-reverse delays is determined based on a minimum-mean-square-error technique.

14. (Original) The device of claim 13, wherein the set of selected delays has a smaller mean-square-error than the other set of delays.

15. (Original) The device of claim 11, further comprising an equalizer that estimates a number of symbols based on the selected set of delays.

16. (Original) The device of claim 15, wherein the estimated symbols are estimated based on a decision-feedback-estimation (DFE) technique.

17. (Original) The device of claim 16, wherein the detected symbols are estimated based on a minimum-mean-square-error - decision-feedback-estimation (MMSE-DFE) technique.

18. (Original) The device of claim 15, wherein the estimated symbols are estimated based on an advanced delayed decision feedback sequence estimation (ADDFSE) technique.

19. (Original) The device of claim 11, further comprising a plurality of receive devices.

20. (Original) The device of claim 19, wherein a first portion of a received signal received by a first antenna is delayed relative to a second portion of the received signal received by a second antenna.